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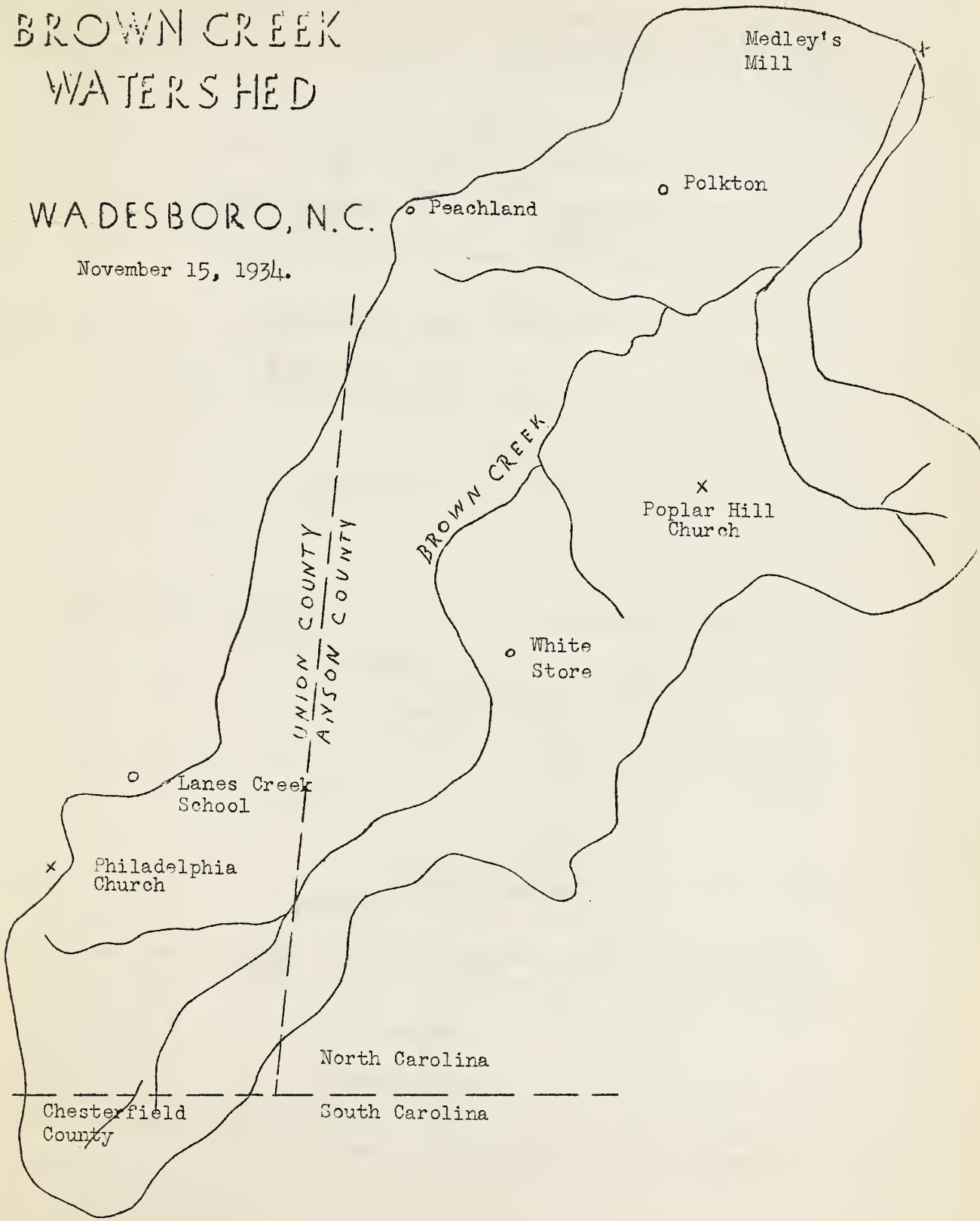
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THE
BROWN CREEK
WATERSHED

VOL. I NO. 5

WADESBORO, N.C.

November 15, 1934.



○ Pageland, S. C.

THE BROWN CREEK WATERSHED is being put out by the Soil Erosion Staff once each month, mainly to assist in telling what we are doing and maintain a spirit of good fellowship with the citizens of the community we endeavor to serve.

EXECUTIVE

E. S. Vanatta, Asst, Regional Director.

W. B. Little, Asst, Extension Agent.

H. M. Stott, Asst. Erosion Specialist.

SOILS

R. C. Pleasants, Asst. Soil Expert.

AGRICULTURAL ENGINEERING

Donald Christy, Asst. Agricultural Engineer.

AGRONOMY

A. A. Cone, Asst. Agronomist.

J. E. Michael, Asst. Agronomist.

FORESTRY

H. P. Hagge, Forester.

Directing personnel for the ECW Camp at Polkton are as follows:

W. B. McManus, Superintendent.

R. B. Stamey, Engineer

S. W. Myers, Foreman.

S. J. Crocker "

C. S. Faw "

C. A. Neal "

C. W. Thompson "

M. L. Ross "

A. E. Hendley, Jr."

B. W. Ingram, Mechanic

W. L. Teal, Clerk-Stenographer.

The farmers living or owning land in the boundaries of the Brown Creek project have a wonderful opportunity in this program.

----- A FREE COUNTRY

A paradise where man may destroy the timber, soil, game, oil and other resources and make a desert for our children.



With the gradual broadening of the scope of our program and evidence of work showing up in several sections of the area of Upper Brown Creek, the people generally are coming to realize the thoroughness with which we are trying to attack our problem. Also most of those who own land in the area are more keenly interested since having opportunity to know more about it. At any rate, wherever the program has actually started, everybody is highly pleased. This is especially the case in connection with both terraces constructed and with cropping plans worked out.

We have been somewhat handicapped recently due to soil survey not having been completed. On those farms for which we do not have the soils information and the landowner is especially anxious to get his program going, we have been trying to get soils survey made as promptly as possible.

Mr. Christy is back on the job after "petering" out on the deer hunt recently. Some of the boys say he will have to grow up before he can stand the gaff. Anyway we are glad to have him back.

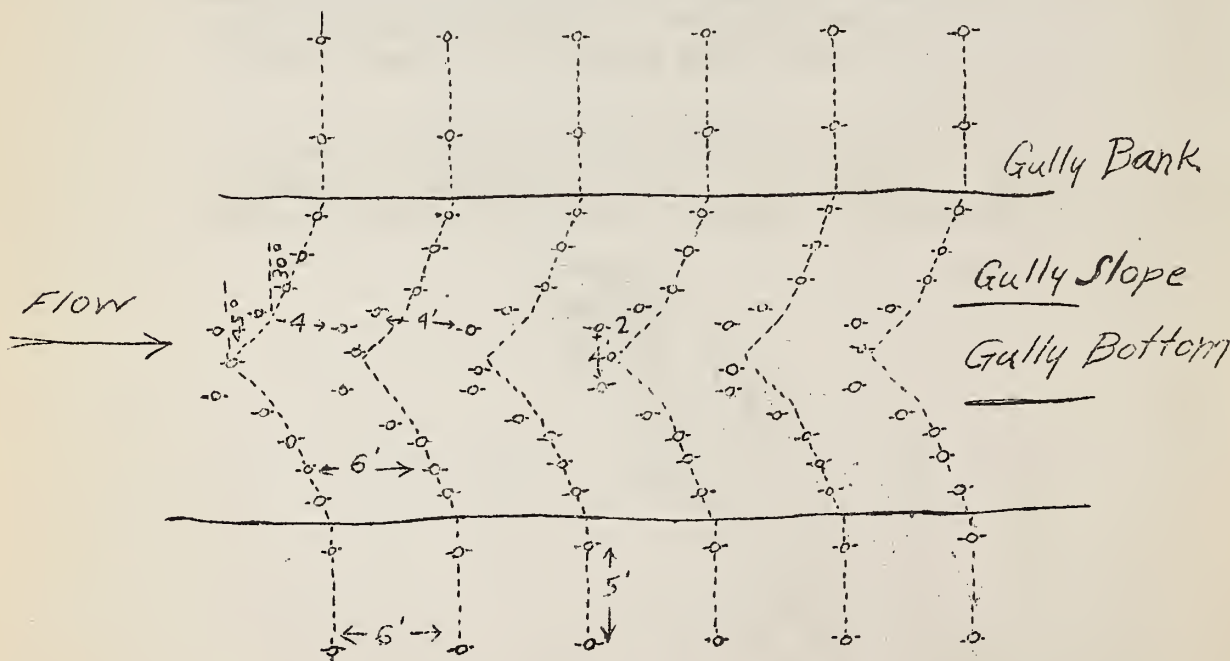


GULLY CONTROL WITH TREES AND VEGETATION

Checking erosion in gullies and on badly eroded areas is an inexpensive procedure with trees and vegetation, and effective if properly planted. Tree planting is primarily an insurance or protection, not against critical erosion, but future erosion. The actual filling of gullies may be only secondary. In this region, from a wood production standpoint, there is no objection to tree growth, and it should not give way to other forms of erosion control. Land very steep or badly gullied, cannot be pastured or cultivated, and practically always mechanical means of reclamation would be prohibitive. In most instances, time is not the important element in complete control of gullies. The gully has already destroyed the immediate section for agricultural purposes, and here a growth of trees, in addition to building up the land with a watershed and wind break protection, may be made a paying investment.

Trees will form the major type of vegetative control but let it be understood that trees, by themselves, will not control erosion for several years, and other vegetation must be inter-planted on badly eroded and gullied areas. Seeds, sod, shrubs, and vines will assist trees to become established. The planting of vines near trees is always objectionable. Often the best results are obtained where a few small check dams are used to hold any soil that otherwise would be carried away in the drainage water. Do not pile brush in a gully without binding it to the floor of the gully in the form of a mat or dam, and if necessary slope the gully banks for tree planting. The brush check will now be wholly or partially covered, and far more effective (See diagram).

- DOUBLE ANGLE BROAD V TYPE PLANTING PLAN -



The tree seedlings should be placed in a broad double-angled, V-shaped line across the gully (See diagram above). On the gully bottom and up one-third on each gully side, the seedlings should be placed in a 2 x 4 or 4 x 4 staggered

arrangement, thus forming a 45 degree angle with the center line of the stream channel. The upper two-thirds of the gully sides should be planted on a 4 x 4 or 5 x 6 staggered arrangement, thus forming a 30 degree angle with the stream channel.

COOPERATIVE AGREEMENTS

H. M. Stott.

Since the last issue of the Brown Creek Watershed and up to November 12th, the following men have signed an agreement with the government for a five-year erosion control plan:

J. W. Collins	Mrs. M. E. Redfern	Mrs. James T. Jones
C. B. Redfern	F. H. Morgan	C. B. Morgan
J. B. Smith	J. F. Hamilton	R. J. Harrington
J. W. Caudle	H. N. Fincher	Rose H. Ross
J. C. Watkins	J. M. Griffin	M. P. Blair
B. B. Horne	Fred Horne	Mrs. Lizzie Boyette
W. T. Caudle	Van O. Bryant	E. H. Horne
E. M. Griffin	J. M. Horne	R. S. Currie
E. E. Price	J. L. Tice	C. H. Trexler
Joe Tice	H. N. Askins	J. C. Huntley, Jr.
L. J. Watford (2)	Mrs. W. C. Sutton	D. B. Watts
C. B. Smith	W. P. & B. B. Broome	B. B. & F. H. Broome
M. L. Horne Estate.		

The above agreements cover a total of 15,221 acres, making a grand total of 23,785 acres so far included in eighty-eight agreements.

AGRONOMY NOTES

A. A. Cone.

Mr. J. C. Caudle of Peachland, N. C. is evidently equal to a diversity of achievements when it is noted that he is practically up with his seeding program. Mr. Caudle has cooperated with the soil erosion service in a fine way. Recently, he has constructed a new home which is ready for occupancy after losing his old home by fire last spring. As soon as possible he expects to begin seeding on an adjoining farm which he expects to work next year. This farm also has been covered by a cooperative agreement and all the idle land has been terraced by the S.E.S. Engineers. Mr. Caudle states that he is exceedingly well pleased with the soil erosion program.

In case any who have signed cooperative agreements and find it absolutely necessary to make changes in the cropping plans, such changes are possible, but it is hoped that these will be kept down to the minimum. No changes can be made without arranging with the Wadesboro office for approval, an amendment to the original agreement.

A worthy potential cooperator walked in Mr. Vanatta's office last week, removed his top cover and stated in clear ringing tones of assurance, "I want some rye." Several members of the staff welcomed the visitor and explained the various details of the agreement, showing that it was necessary for the farmer to cooperate in a well balanced program on his farm to control erosion. It so happens that the soil erosion service furnishes a limited amount of seed, lime,

fertilizer and other materials when the farmer is interested in the entire program and shows a willingness to cooperate with us on his farm. The soil erosion service is not a general supply store dispensing seed, fertilizer, lime, etc., to be utilized by him in general cropping needs.

A well rounded program embraces what we consider is necessary to control erosion on a given farm. No two farms are identical, therefore the method of attack is different in nearly every instance. Certain general principles are adhered to in a given area to combat the menace of erosion. The program includes running terrace lines and terracing the mild slopes, the farmer furnishing a part of the power where available. In certain instances it will be necessary for the farmer to furnish labor and fence posts where small areas are removed from cultivation. A recent order limits the fencing which can be furnished by the government to a few acres where it is absolutely necessary to protect badly eroded spots from grazing. The five year cropping plan is possibly the most important matter to be considered in drawing up an agreement. On some farms it is necessary to take steep slopes out of cultivation and plant to some other erosion resisting crop. The maintenance of improvements, protecting forest areas from fire and grazing, the practice of strip-cropping, contour tillage of cultivated land and contour-furrowing of pasture land are some of the methods employed in controlling soil erosion and formulating a well rounded program.

Fall seeding in the area is well under way and should be completed in the next two weeks.

Attention is called to the matter of preparing pasture land for seeding in February. The preparation of land for Alfalfa is another important piece of work to look after between now and spring. It is too late now to sow these crops, as in most instances the land is not well prepared and this is very important in getting a good start.

Up to date the soil erosion service has planted 512 acres of various crops with seed furnished by the Agronomy Department.

AGRICULTURAL ENGINEERING

Donald Christy.

A Deed to your land won't hold the soil, but a terrace with proper crop rotation will.

After a big rain last summer in the Piedmont of South Carolina I visited a farm where terraces had been broken. I walked through the field to see what damage had been done by the downpour of the day before. The water had run over the top terrace and had not washed it badly. However the addition of the water from the top terrace to that of the next one broke the second terrace. The real damage began there. The lower terrace could not withstand the deluge from above, broke and formed a small gully down through the center of the field.

Those terraces were not mended promptly and built better than before hence the gully now is of considerable size and still growing. If however the terrace had been promptly and well repaired the farmer would have had the field back in good tilth by now.

Two tractors with terracers will arrive in the near future. These tractors are to be put on the farms where we have received the best cooperation. These tractors, with the three that we have now, will make a total of five operated by the Soil Erosion Service. An additional five to seven farm tractors are operating daily, making a total of ten or more.

Soil Erosion Service tractors are to be used to help the farmer, consequently after rains it will be the cooperating farmers' responsibility to see that the land is not worked too wet. The farmer is the judge as to when the land is too wet for terracing and should so state to the tractor crew.

There are from two to five mule teams going, and they are constructing good terraces. Mr. Joe Tice and Mr. Walter Jones are certainly building good terraces and are doing it at a rate of 600 to 1200 feet per day, or about one to three acres. Where the farmer wishes to do terracing with his own power we will place a man with him to help with the construction.

Crops may be and should be grown on the terrace and in the channel of the terraces which are being constructed. In other words no land is to be lost by using terraces, but of course row crops should not be planted on a new terrace which has not had time to settle.

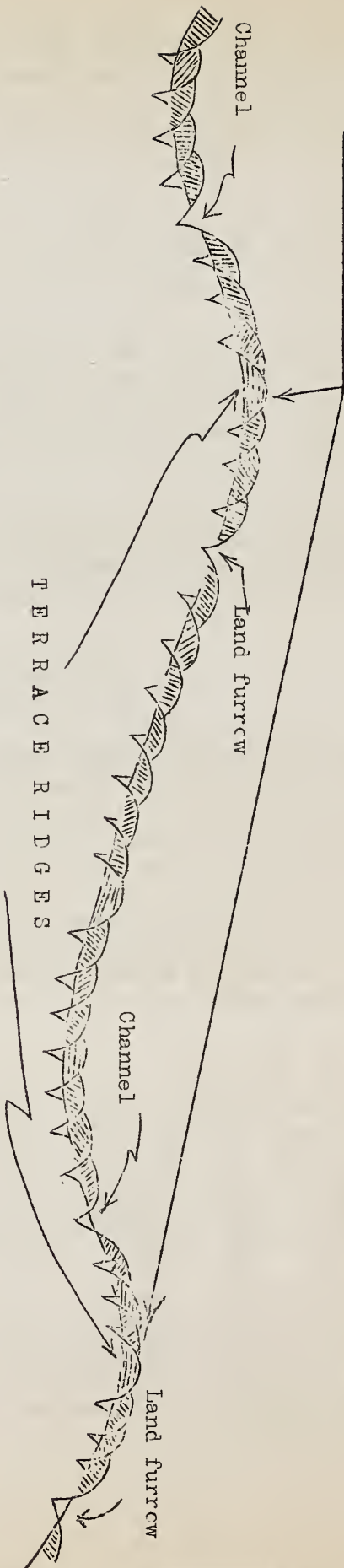
SOILS DEPARTMENT
R. C. Pleasants.

How many of you people living within the boundaries of the Brown Creek Watershed area have noticed and wondered about the differences in the general character of the soils lying on the eastern and western slopes of Brown Creek? There is a difference as you must all agree. A difference in topography, in structure, in texture, in color, in crop adaptations, even in the degree of erosion. The soils on the eastern slope are or have been sandy, the sun-soils are often sticky or impervious and the slopes are usually more gentle than are those of the area on the western slope. On the other hand, throughout the area on the western slope, the topography is rolling, the soils fine in texture, and erosion while serious, is not so far advanced as that of the eastern slope.

Now for the generally accepted explanation of this noticeable difference in these eastern and western slopes. According to geologists you people living on the former or eastern slope are occupying land that centuries ago was a lake-bed. This lake, lying at the foot of high mountains, was filled by slow erosion, reducing the mountains at the same time. Then perhaps an upheaval of some kind further raised the lake-bed into ridges and slopes, giving rise to a soil made up of a general mixture and varying greatly within a small area.

A recent recognizance survey made by the Soil Erosion Service covering North Carolina shows the condition as the result of erosion in each county. Anson shows to be eroded to a more appalling extent than any other. In Anson there is more than average precaution taken to resist erosion. We simply have a soil very subject to being washed away and requiring a more thorough effort if we are to hold it in place.

No. 1. Start listing (here) on terrace ridge and then break the strip between each two succeeding terraces as a separate strip. The location of the finishing furrow may be varied by listing more or less to one of the terraces than the other.



No. 2. One variation from this, is after starting the list on the terrace ridge as under No. 1 and continuing to the bottom of the channel on the upper side start another list 8 or 10 feet above the channel and throw the dirt up hill from the channel, then plow out the remaining strip of land.

If terraces are built large in the beginning they are easy to maintain. It is best to break terraced land parallel to the terraces, thus giving a view as above if we took out a vertical slice of the field. When one of these systems is followed no additional maintenance should be needed.

If one of the above methods of breaking is consistently followed it may be the means of not only maintaining but also of improving the terraces each time the land is plowed. Such practices will make the field a series of gentle waves. Always bear in mind the maintenance of your terrace when any tillage operations are being done.

ECW CAMP.

Now that Autumn is here and the farmer has pretty nearly ended his year's labor - and probably to no great financial advantage - then he must wonder just what the trouble is. Part of the answer is eroded lands - and we are glad to think this same farmer has familiarized himself with the great damage being done by soil erosion throughout the length of our land and particularly in this section. So a stride forward has been made. The year's work has been fruitful.

Too, it is very gratifying to us to note the splendid cooperation of the landowners within this area, demonstrating their appreciation of the value of the work. In fact we have not been able to get to all the farms as fast as they think we should. The camp is doing its best to do the work in a speedy and worth-while way - to render you this service which is so vitally necessary to protect your fast eroding soils - assisting nature to rebuild its producing power.

The camp forces have to date covered thirty farms in some phase of the work, mainly in gully control, sloping and seeding galled spots and slopes. Then too the Soil Erosion Service proper has been carrying on in a big way, our forces being coordinated with theirs in the carrying out of the general plan.

We are glad that we have now begun operating on a larger scale in forestry work and we know the service being done in this line will be of inestimable value to the residents of this section.

The enrolled strength of our company is again at full quota since the discharge of the last lot of men who had served their period of enrollment. This will mean more progress, and if you will bear with us a little longer we will get to you as quickly as possible. The service is for the area as a whole and we must take the individual farms as we are able to get to them.

We have a keen interest in all the farm owners within the area and are always glad to see them. This enables us to exchange ideas with a chance for mutual benefit.

Anson, Union and Chesterfield Counties are joining in the publication of a Soil Erosion Handbook, containing interesting and instructive data on the control of erosion. These booklets will be distributed to the landowners in the Brown Creek area and probably some distributed by the respective county agents to others who may be interested and call for them. They will be available in about two weeks.

HELP
PREVENT FIRES

F
I
R
E

DOES NO ONE ANY GOOD

DESTROYS YOUNG TREES

RETARDS TREE GROWTH

PROMOTES EROSION

INCREASES RUNOFF

IMPOVERISHES SOIL

DECREASES GAME

REDUCES DESIRABLE FORAGE

BE CAREFUL WITH FIRE

IT PAYS